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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,874	01/21/2004	Terrance L. Bescup	59486US002	3143

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EXAMINER	
BASHORE, ALAIN L	

ART UNIT	PAPER NUMBER
1792	

NOTIFICATION DATE	DELIVERY MODE
08/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com
LegalDocketing@mmm.com

Office Action Summary	Application No.	Applicant(s)	
	10/761,874	BESCUP ET AL.	
	Examiner	Art Unit	
	Alain L. Bashore	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 3-7, 9-24, 26-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-7, 9-24, 26-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5-6-08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4-30-08 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 32-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation of "one high force field" does not appear to be explicitly disclosed in the originally filed specification. The rejection may be obviated by a showing where this is disclosed in the specification.

4. Claims 32-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "high" is considered vague and indefinite because no meets and bounds are present.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-9, 13-14, 21-24, 26-30, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist et al ('196) in view of Richart et al.

Palmquist et al discloses a method of making retroreflective elements. A plurality of core particles is provided, and coating of the particles with an unsolidified polymeric composition forming coated particles this then performed. The coated particles with optical elements is combined (by mechanical mixing) such that optical elements are embedded in the unsolidified polymeric composition and solidifying the polymeric composition forming retroreflective element. There is separating of the retroreflector elements from the unembeded optical elements (col 3, lines 1-73; col 4, lines 27-36).

Plamquist et al discloses crushed greystone rock that is coated with resin which is then given a degree of tackiness after which it is combined with glass beads. The beads are embedded in the resin/greystone, all of which is then solidified (col 3, lines 5-73).

Regarding specific core particle type and size ranges, the reference to Palmquist discloses variable particles, such that one with ordinary skill in the art would utilize any specific type and size for specific application in absence of unexpected or unobvious results.

Palmquist et al does not explicitly disclose a continuous process or where the combining further includes mechanical mixing further with at least one rotating mixing member further being a disc.

Richart et al discloses a continuous process for coating particles including use of a rotating member further being a disc (see col 3, lines 33-39; col 5, lines 28-40), and use of a high force field because of the disclosed use of electrostatic coating (col 4, line 58).

It would have been obvious to one with ordinary skill in the art to include a continuous process for coating particles including the use of a rotating member further being a disc because Plamquist et al discloses coating particles, and that a continuous process is more efficient than a batch process per se in engineering generally.

It would have been obvious to one with ordinary skill in the art to ultilize a high force filed because the use of electrostatic coating is generally known as an efficient coating technique.

7. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist et al ('196) in view of Richart et al as applied to claims above, and further in view of Ajax LynFlow Continuous Mixer Reference (LynFlow reference).

Palmquist et al ('196) and Richart et al do not disclose the mixing member being an extruder screw or at least two co-rotating or counter-rotating mixing members.

The LynFlow reference discloses a mixing member being an extruder screw or at least two co-rotating or counter-rotating mixing members (see page 1).

It would have been obvious to one with ordinary skill in the art to include a mixing member being an extruder screw or at least two co-rotating or counter-rotating mixing members because the LynFlow reference teaches advantageous per se "(see paragraphs under "the principle" section).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist et al ('196) in view of Richart et al as applied to claims above, and further in view of Eirich et al.

Palmquist et al ('196) and Song et al do not disclose the mixing member comprising a grinding plate.

Eirich et al discloses a mixing member comprising a grinding plate (see fig 1).

It would have been obvious to one with ordinary skill in the art to include a mixing member comprising a grinding plate because Eirich et al teaches advantages of a grinding plate (col 1, lines 30-31).

9. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist et al ('196) in view of Richart et al as applied to claims above, and further in view of Lange ('469).

Palmquist et al ('196) and Richart et al do not disclose optical elements as microcrystalline beads as glass-ceramic beads or non-vitreous beads.

Lange discloses optical elements as microcrystalline beads as glass-ceramic beads or non-vitreous beads (col 1, lines 28-68; col 2, lines 1-53).

It would have been obvious to one with ordinary skill in the art to include optical elements as microcrystalline beads as glass-ceramic beads or non-vitreous beads because Lange teaches durability.

10. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist et al ('196) in view of Richart et al as applied to claims above, and further in view of Schleifstein.

Palmquist et al ('196) and Richart et al do not disclose an adhesion promoting agent, or a floatation agent that further is a flurochemical.

Schleifstein discloses an adhesion promoting agent, and a floatation agent that further is a flurochemical (col 3, lines 65-67; col 4, lines 1-54).

It would have been obvious to one with ordinary skill in the art to include an adhesion promoting agent, and a floatation agent that further is a flurochemical because Schlesifstein teaches advantages for promoting characteristics of floatation and adhesion.

11. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist et al ('196) in view of Richart et al as applied to claims above, and further in view Bates.

Palmquist et al ('196) and Richart et al do not disclose the recitation of claim 33.

Bates teaches a relationship between mixing member surface area and mixing material volume (col 2, lines 63-70).

It would have been obvious to one with ordinary skill in the art to include the recitation of claim 33 because Bates teaches mixing efficiencies. Regarding the specific ration claimed, such would be obvious design choice by one with ordinary skill in the art to obtain maximum process efficiency.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alain L. Bashore/
Primary Examiner, Art Unit 1792